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| 09/245,442 | 02/04/1999 | DONALD M. BELLENGER | 01-175-B | 4893 |

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| EXAMINER |
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NGUYEN, PHUONGCHAU BA

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| ART UNIT | PAPER NUMBER |
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2616

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02/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/245,442

Applicant(s)

BELLENGER, DONALD M.

Examiner

Phuongchau Ba Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8-31 and 33-40 is/are allowed.
- 6) ☒ Claim(s) 41-45 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Objections

1. Claims 1 and 41 are objected to because of the following informalities:

-Claim 1, lines 5-6,

“said plurality of tags corresponds to a plurality of flow detectors”

is not clearly shown in the disclosed figures, e.g., according to figure 1 –

as if the flow detect logic 215 preferred as flow detector, the claimed

language should be changed so that the claimed limitation would be

positively recited, thus “said plurality of tags corresponds to a plurality of

flow detectors” in claim 1 should be changed to ---said plurality of tags

corresponding to a plurality of flow detectors in a flow switch node---.

-Claim 41, line 7,

“the header” should be changed to ---the route header---

Appropriate correction is required.

Claim Rejections – 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 41–45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kloth in view of Abaye (7,260,060).

Regarding 41,

Kloth (6,842,453) discloses a method of switching an Ethernet packet (fig.5), the method comprising:

computing a tag (i.e., XTAG 604, a hit in the shortcut table 700) for the Ethernet packet, said tag computed using two or more fields in said packet, wherein said fields are selected from Ethernet (i.e., MAC address) and network (i.e., destination) headers in said packet (step 508–fig.5), see col.6, lines 32–58; col.8, lines 17–24;

looking up the computed tag in a table (i.e., table 600/700), the table containing entries associated with tags, the entries associating switching information with a tag, said switching information defining a route through a plurality of interconnected switch nodes (step 516—fig.5, see also col.7, lines 3–12, 23–37); and

Kloth discloses all the claimed limitations, except (1) including a route header with the packet, wherein the (route) header includes routing information for multiple hops through a plurality of nodes.

However in the same field of endeavor, Abaye (7,260,060) discloses attaching a MPLS label in the packet header to an IP data stream, wherein the MPLS label contains specific routing information of paths (which comprises nodes/hops—emphasis added), see col.8, lines 57–col.9, line 23, corresponding to (1). Therefore, it would have been obvious to an artisan to apply Abaye's teaching to Kloth's system with motivation being to speeding up IP-based data communication networks by routing at the edge and switching at the core.

Regarding claim 42, Abaye further discloses wherein the route header is

updated as the packet is switched at each node of the route (MPLS standard feature, see col.8, lines 57–col.9, line 23).

Regarding claim 43, Abaya further discloses wherein the route header is removed after the packet routed through the node (MPLS standard feature, see col.8, lines 57–col.9, line 23).

Regarding claim 44,

Abaya further discloses wherein the route header consists of a plurality of bytes, each of the plurality of bytes specifying one or more hops of the route (see col.8, lines 57–col.9, line 23, also wherein the header of IP packet would be limited to 5 bytes, standard IP packet–emphasis added, thus the MPLS label in the route header associating with one or more hops of the route).

Regarding claim 45,

Abaya further discloses wherein the route header is created from the switching information associated with the plurality of tags (MPLS standard

feature, see col.8, lines 57–col.9, line 23 wherein MPLS switching labels via router).

Allowable Subject Matter

4. Claims 1–6 and 8–31,33–40 allowed.

Response to Arguments

5. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Thursday from 8:30 a.m. to 7:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

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Private PAIR only. For more information about the PAIR system, see


<http://pair-direct.uspto.gov>. Should you have questions on access to the

Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.


Phuongchau Ba Nguyen
Examiner
Art Unit 2616